

Abstract of the Disclosure

A method for converts an adaptively sampled distance field of a graphics model to a triangle model. The adaptively sampled distance field includes surface cells storing distance values that have corresponding gradients. A vertex is assigned to a center location of each surface cell. The vertices of neighboring surface cells are connected to form triangles while satisfying a predetermined constraint. Then, each vertex is moved, in a single step, to a new location according to the distance value and corresponding gradient of the vertex to substantially conform the triangles to a surface of the model.